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## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

Claims 1-7 (Canceled)

Claim 8. (Amended) An apparatus comprising:

a body having a sealed cavity disposed therein, said cavity being less than [about] 1000 µm deep;

a substrate comprising a surface mated to said body, whereby said surface contacts and seals said cavity, wherein said surface comprises polymers; and

an inlet port and an outlet port, said inlet port and said outlet port being in fluid communication with said cavity.

Claim 9. (Previously Presented) The apparatus of claim 8, wherein said polymers are polynucleotides.

Claim 10. (Previously Presented) The apparatus of claim 8, wherein said polymers are polypeptides.

Claim 11. (Amended) An apparatus comprising:

a body having a sealed cavity disposed therein, said cavity being less than [about] 1000 µm deep;

a substrate comprising a surface mated to said body, whereby said surface contacts and seals said cavity, wherein said surface comprises polynucleotides, and

an inlet port and an outlet port, said inlet port and said outlet port being in fluid communication with said cavity.

Claim 12. (Previously Presented) The apparatus of claim 11, wherein said cavity is less than about 500 µm deep.

Claim 13. (Amended) An apparatus comprising:

a body having a sealed cavity disposed therein, said cavity being less than [about] 1000 µm deep;

a-substrate comprising-a-surface-mated-to-said-body, whereby-said-surface-contacts and seals said cavity, wherein said surface comprises polypeptides, and

an inlet port and an outlet port, said inlet port and said outlet port being in fluid communication with said cavity.

Claim 14. (Previously Presented) The apparatus of claim 13, wherein said cavity is less than about 500 µm deep.

Claim 15. (Previously Presented) An apparatus comprising:

a body having a sealed cavity disposed therein, said cavity being less than 500  $\mu m$  deep;

a substrate comprising a surface mated to said body, whereby said surface contacts and seals said cavity, wherein said surface comprises polymers; and

an inlet port and an outlet port, said inlet port and said outlet port being in fluid communication with said cavity.

Claim 16. (Previously Presented) The apparatus of claim 15 wherein said polymers are polynucleotides.

Claim 17. (Previously Presented) The apparatus of claim 15, wherein said polymers are polypeptides.

Claim 18. (Previously Presented) An apparatus comprising:

a glass substrate having a surface comprising polymers, said surface mated to a body having a cavity for sealing said cavity such that said surface is in fluid communication with said cavity;

an inlet port and an outlet port, said inlet port and said outlet port being in communication with said cavity, wherein said cavity is less than 1000 µm deep;

a fluid flowing means coupled to said inlet port.

Claim 19. (Previously Presented) The apparatus of claim 18, wherein said polymers are polynucleotides.

Claim 20. (Previously Presented) The apparatus of claim 18, wherein said polymers are polypeptides.

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Claim 21. (Previously Presented) The apparatus of claim 18, further comprising a pump-positioned to flow said fluid into said cavity through said inlet port and out of said cavity through said outlet port.

Claim 22. (Previously Presented) The apparatus of claim 18, further comprising a means for heating said cavity.